

**REMARKS**

**Status of the claims:**

With the above amendments, claims 1, 2, 4, and 5 are amended. Claims 1-5 are pending and ready for further action on the merits. No new matter has been added by way of the above amendments. Support for the amendment to claim 1 comes from page 4, line 24 to page 5, line 6. All other amendments are for form or to comply with U.S. claim practice and are non-narrowing in scope. Reconsideration is respectfully requested in light of the following remarks.

**Oath/Declaration**

The Examiner asserts that Toshihiro Tanaka and Yozo Onishi signatures are missing from the Oath/ Declaration. Applicants herein resubmit an Oath/Declaration that has the signatures of all of the inventors. Please note that the signature appears below the signature line for some of the inventors.

**Claim Objections**

The Examiner objects to claim 1 for reciting the phrase "typing for distinguishing the site(s) of single nucleotide polymorphism of nucleotides contained in a plurality of nucleotide sequences amplified in the above amplification step using the amplified nucleotide sequences". In particular, the

Examiner objects to the phrase "using the amplified nucleotide sequences" saying it is redundant. Applicants have amended claim 1 to recite "typing for distinguishing the site(s) of single nucleotide polymorphism of nucleotide sequences amplified in the above amplification step using the amplified nucleotide sequences". Applicants believe that with this amendment, the objection is obviated. Withdrawal of the objection is warranted and respectfully requested.

The Examiner objects to claim 2 for reciting the following phrase, "amplifying employs the polymerase chain reaction" asserting that the phrase should recite "amplifying employs a polymerase chain reaction". Applicants have amended the claim accordingly. Withdrawal of the objection is warranted and respectfully requested.

**Rejections under 35 USC §102**

Claims 1-5 are rejected under 35 USC §102(a) as being anticipated by Ohnishi et al. (Journal of Human Genetics, August 2001, 46(8), pp. 471-477). Applicants herein enclose a "Katz" declaration under 37 CFR §1.132 that removes the Ohnishi et al. reference as prior art. Because this reference is no longer available as prior art, the rejection has been obviated. Withdrawal of the rejection is warranted and respectfully requested.

Claims 1 and 5 are rejected under 35 USC §102(b) as being anticipated by Wang et al. (Science, May 1998, 280, pp. 1077-1082).

Claims 1, 2, and 4 are rejected under 35 USC §102(b) as being anticipated by Walburger et al. (Mutation Research, January 2001, 432, pp. 69-78).

Applicants have amended claim 1 to recite "using genomic DNA whose amount is 10-40 ng per 100 sites", which is not disclosed or suggested by either of Wang et al. or Walburger et al. Because Wang et al. and Walburger et al. do not disclose or suggest this feature, they cannot anticipate the instant invention. This is because Wang et al. and Walburger et al. fail to disclose all of the elements of the instantly claimed invention. Withdrawal of the rejections is warranted and respectfully requested.

**Rejections under 35 USC §103**

Claims 2 and 3 are rejected under 35 USC §103(a) as being unpatentable over Wang et al. (Science, May 1998, 280, pp. 1077-1082) in view of Brookes '670 (US Patent Application Publication 2001/0046670 A1, published November 29, 2001, with a priority date of October 7, 1999).

Claim 3 is rejected under 35 USC §103(a) as being unpatentable over Walburger et al. (Mutation Research, January

2001, 432, pp. 69-78) in view of Wang et al. (Science, May 1998, 280, pp. 1077-1082).

None of Wang et al., Brookes '670, or Walburger et al. disclose or suggest a relationship between the amount of genomic DNA for SNP typing and the number of sites for SNP typing as is claimed in instant claim 1. Accordingly, Applicants assert that the Examiner has failed to make out a *prima facie* case of obviousness with regard to the 35 USC §103(a) rejections over Wang et al. in view of Brookes '670 and Walburger et al. in view of Wang et al. Three criteria must be met to make out a *prima facie* case of obviousness.

- 1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
- 2) There must be a reasonable expectation of success.
- 3) The prior art reference (or references when combined) must teach or suggest all the claim limitations.

See MPEP §2142 and *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). In particular, the Examiner has failed to meet the third element to make a *prima facie* obviousness rejection. Because none of the references disclose the relationship between the amount of genomic DNA for SNP typing and the number of sites for SNP typing as is claimed in instant claim 1, none of the references

can render obvious the instant invention, either used alone or in combination. The rejections are inapposite. Withdrawal of the rejections is warranted and respectfully requested.

With the above remarks and amendments, Applicants believe that the claims, as they now stand, define patentable subject matter such that passage of the instant invention to allowance is warranted. A Notice to that effect is earnestly solicited.


If any questions remain regarding the above matters, please contact Applicant's representative, T. Benjamin Schroeder (Reg. No. 50,990), in the Washington metropolitan area at the phone number listed below.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a three (3) month extension of time for filing a response in connection with the present application. The required fee of \$950.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Andrew D. Meikle, #32,868

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Attachment: Katz Declaration under 37 CFR §1.132  
Copy of Declaration originally filed on  
February 1, 2002



PATENT  
1254-0195P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: NAKAMURA, Yusuke et al. Conf.: 7091  
Appl. No.: 10/060,301 Group: 1637  
Filed: February 1, 2002 Examiner: KIM, Y.J.  
For: A METHOD FOR SNP (SINGLE NUCLEOTIDE  
POLYMORPHISM) TYPING

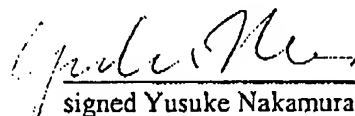
DECLARATION UNDER 37 CFR §1.132

I, Yusuke Nakamura, declare and state

- 1) I am familiar with the Office Action dated October 22, 2003 in connection with the above-identified application.
- 2) I am one of the inventors listed on the above-identified application.
- 3) I am also one of the authors of the paper Ohnishi et al. (Journal of Human Genetics, August 2001, 46(8), pp. 471-477) cited in the Office Action dated October 22, 2003.
- 4) Hideyuki Suzuki, one of the authors listed on the Ohnishi et al. (Journal of Human Genetics, August 2001, 46(8), pp. 471-477) paper is not an inventor of the above-identified application.
- 5) Hideyuki Suzuki worked under the direct supervision of University of Tokyo and did not make any inventive contribution to the above-identified application.

I hereby declare all statements made herein of my own knowledge are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment or both under 18 USC §1001, and that such willful false statements may jeopardize the validity of the application or any patent that issues therefrom.

April 13, 2004  
date

  
signed Yusuke Nakamura

COPY

Attorney's Docket No.: 1254-0195P

## DECLARATION, POWER OF ATTORNEY AND PETITION



I (We), the undersigned inventor(s), hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I (We) believe that I am (we are) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

A METHOD FOR SNP (single nucleotide polymorphism) TYPING

the specification of which

☐ is attached hereto.

☒ was filed on \_\_\_\_\_ as

Application Serial No. New

and amended on \_\_\_\_\_.

☐ was filed as PCT international application

Number \_\_\_\_\_

on \_\_\_\_\_,

and was amended under PCT Article 19

on \_\_\_\_\_ (if applicable).

I (We) hereby state that I (We) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above; that I (We) do not know and do not believe that this invention was ever known or used before my invention or discovery thereof, or patented or described in any printed publication in any country before my invention or discovery thereof, or more than one year prior to this application, or in public use or on sale in the United States for more than one year prior to this application; that this invention or discovery has not been patented or made the subject of an inventor's certificate in any country foreign to the United States on an application filed by me or my legal representatives or assigns more than twelve months before this application.



I (We) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

I (We) hereby claim foreign priority benefits under Section 119(a)-(d) of Title 35 United States Code, of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Application No.	Country	Filing date	Priority claimed	
<u>25700/2001</u>	<u>Japan</u>	<u>February 1, 2001</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby claim the benefit under Section 119(e) of Title 35 United States Code, of any United States application(s) listed below.

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

\_\_\_\_\_  
(Application Number)

\_\_\_\_\_  
(Filing Date)

I (We) hereby claim the benefit under Section 120 of Title 35 United States Code, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Section 112 of Title 35 United States Code, I (We) acknowledge the duty to disclose material information as defined in Section 1.56(a) of Title 37 Code of Federal Regulations, which occurred between the filing date of the prior application and national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (pending, patented, abandoned)
_____	_____	_____
_____	_____	_____
_____	_____	_____

And I (We) hereby appoint: Raymond C. Stewart, Registration No. 21,066; Terrell C. Birch, Registration No. 19,382; Joseph A. Kolasch, Registration No. 22,463; Anthony L. Birch, Registration No. 26,122; James M. Slattery, Registration No. 28,380; Bernard L. Sweeney, Registration No. 24,448; Donald C. Kolasch, Registration No. 23,038; Michael K. Mutter, Registration No. 29,680; Charles Gorenstein, Registration No. 29,271; Gerald M. Murphy, Jr., Registration No. 28,977; Leonard R. Svensson, Registration No. 30,330; Terry L. Clark, Registration No. 32,644; Marc S. Weiner, Registration No. 32,181; and Andrew D. Meikle, Registration No. 32,868.

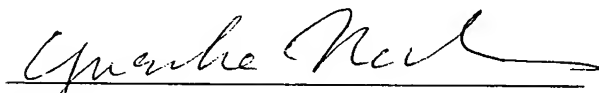
I(We) hereby request that all correspondence regarding this application be sent to the firm of BIRCH, STEWART, KOLASCH & BIRCH, LLP whose Post office address is: 8110 Gatehouse Road, Suite 500 East, Falls Church, Virginia 22042 U.S.A.

I (We) declare further that all statements made herein of my (our) knowledge are true and that all statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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